## **Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## What is claimed is:

1. (Currently Amended) A compound of formula (I) or a pharmaceutically acceptable salt thereof:

$$R^3$$
 $R^4$ 
 $R^5$ 
 $R^6$ 
 $R^1$ 
 $R^1$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^1$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $R^6$ 
 $R^6$ 

wherein:

R<sup>1</sup> is

Aryl optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkoxy, halogen, -CN,  $C_{1-6}$  alkyl optionally substituted by one or more halogens, -OH, and  $C_{1-6}$  alkylCO;

Heteroaryl optionally substituted by C<sub>1-3</sub> alkyl;

C<sub>3-7</sub> cycloalkyl;

Heterocyclyl; or

Aryl fused to a heterocyclyl ring;

R<sup>2</sup> is hydrogen or C<sub>1-6</sub> alkyl;

R<sup>3</sup> is

Hydrogen;

C<sub>1-6</sub> alkyl optionally substituted by one or more substituents selected from the group consisting of: heterocyclyl (itself optionally substituted by C<sub>1-6</sub> alkyl), R<sup>7</sup>R<sup>8</sup>NCO-, R<sup>9</sup>CONR<sup>10</sup>-, C<sub>1-6</sub> alkoxy, R<sup>11</sup>R<sup>12</sup>N-, and C<sub>1-3</sub> alkyl sulfonyl;

C<sub>3-7</sub> cycloalkyl;

Aryl(CH<sub>2</sub>)<sub>m</sub>- wherein the aryl is optionally substituted by one or more substituents selected from the group consisting of: halogen and C<sub>1-6</sub> alkoxy;

Aryl fused to a heterocyclyl ring;

Aryl fused to a  $C_{4-7}$  cycloalkyl wherein the cycloalkyl is optionally susbstituted by =O;

Heteroaryl( $CH_2$ )<sub>m</sub>- wherein the heteroaryl is optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkyl, halogen and  $C_{1-6}$  alkoxy; or

Heterocyclyl( $CH_2$ )<sub>m</sub>- wherein the heterocyclyl is optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkylCO,  $C_{1-6}$  alkyl;

R<sup>4</sup> is hydrogen or C<sub>1-6</sub> alkyl;

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are attached may form a heterocyclyl ring, which is optionally substituted by one or more

substituents selected from the group consisting of:  $C_{1-6}$  alkylCO,  $C_{1-6}$ alkoxy,  $C_{3-7}$ cycloalkyl, OH, halogen,  $C_{1-6}$  alkyl, - $(CH_2)_mNR^{13}R^{14}$ , - $(CH_2)_mCONR^{15}R^{16}$ , - $(CH_2)_mNR^{17}COR^{18}$ , heteroaryl, heteroaryl $C_{1-4}$ alkyl, heteroarylCO, - $CO_2C_{1-6}$ alkyl and  $C_{1-6}$ alkoxy $C_{1-4}$ alkyl;

R<sup>5</sup> is hydrogen or C<sub>1-6</sub> alkyl;

R<sup>6</sup> is hydrogen, C<sub>1-6</sub> alkyl, C<sub>1-6</sub>alkoxy, fluorine, chlorine, or bromine;

m is 0-6:

R<sup>7-18</sup> all independently represent hydrogen, or C<sub>1-6</sub> alkyl;

R<sup>7</sup> and R<sup>8</sup> together with the nitrogen atom to which they are attached may form a heterocyclyl ring;

R<sup>11</sup> and R<sup>12</sup> together with the nitrogen atom to which they are attached may form a heterocyclyl ring; and

R<sup>13</sup> and R<sup>14</sup> together with the nitrogen atom to which they are attached may form a heterocyclyl ring.

2. (Currently Amended) A compound according to claim 1 wherein:

R<sup>1</sup> is

Aryl optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkoxy, halogen, -CN,  $C_{1-6}$  alkyl optionally substituted by one or more halogens, -OH, and  $C_{1-6}$  alkylCO;

Heteroaryl optionally substituted by C<sub>1-3</sub> alkyl;

C<sub>3-7</sub> cycloalkyl;

Heterocyclyl; or

Aryl fused to a heterocyclyl ring;

R<sup>2</sup> is hydrogen;

R<sup>3</sup> is

Hydrogen;

 $C_{1-6}$  alkyl optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-3}$  alkoxy and  $C_{1-3}$  alkyl sulfonyl;

C<sub>3-7</sub> cycloalkyl;

Aryl(CH<sub>2</sub>)<sub>m</sub>- wherein the aryl is optionally substituted by one or more substituents selected from the group consisting of: halogen and C<sub>1-3</sub> alkoxy;

Aryl fused to a heterocyclyl ring;

Aryl fused to a  $C_{4-7}$  cycloalkyl wherein the cycloalkyl is optionally substituted by =O;

Heteroaryl( $CH_2$ )<sub>m</sub>- wherein the heteroaryl is optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkyl, halogen and  $C_{1-6}$  alkoxy; or

Heterocyclyl( $CH_2$ )<sub>m</sub>- wherein the heterocyclyl is optionally substituted by  $C_{1-6}$  alkyl;

R<sup>4</sup> is hydrogen or C<sub>1-6</sub> alkyl;

 $R^3$  and  $R^4$  together with the nitrogen atom to which they are attached may form a heterocyclyl ring, which is optionally substituted by one or more substituents selected from the group consisting of:  $C_{1-6}$  alkylCO, halogen,  $C_{1-6}$  alkyl,  $-(CH_2)_mNR^{13}R^{14}$ ,  $-CO_2C_{1-6}$  alkyl and  $C_{1-3}$  alkoxy $C_{1-3}$  alkyl;

R<sup>5</sup> is hydrogen;

R<sup>6</sup> is hydrogen or C<sub>1-6</sub> alkyl;

m is 0-6;

R<sup>13</sup> and R<sup>14</sup> are independently selected from C<sub>1-6</sub> alkyl.

3. (Currently Amended) A compound according to claim 1 or 2 wherein:

R<sup>1</sup> is selected from

Phenyl substituted by one or more substituents selected from the group consisting of: methoxy, halogen, methyl, trifluoromethyl, -OH and  $C_{1-3}$  alkylCO;

Heteroaryl optionally substituted by methyl; and

Phenyl fused to a heterocyclyl ring.

4. (Currently Amended) A compound according to any of claims 1 to 3 wherein:

R<sup>3</sup> is selected from:

Hydrogen;

C<sub>1-4</sub> alkyl optionally substituted by methoxy or methylsulfonyl;

C<sub>4-6</sub> cycloalkyl;

Phenyl substituted by one or more substituents selected from halogen or methoxy;

Phenyl fused to a 5 membered heterocyclyl ring containing 1 or 2 oxygen atoms;

Phenyl fused to a  $C_{4-7}$  cycloalkyl, wherein the cycloalkyl is substituted by =O;

Heteroaryl(CH<sub>2</sub>)<sub>m</sub>- wherein the heteroaryl is optionally substituted by methyl, methoxy or halogen; and

Heterocyclyl( $CH_2$ )<sub>m</sub>- wherein the heterocyclyl contains either five or six atoms including one or two heteroatoms selected from nitrogen or oxygen and wherein the heterocyclyl is optionally substituted by  $C_{1-2}$  alkyl.

5. (Currently Amended) A compound according to any of claims 1 to 3 wherein:

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are attached <del>may</del> form a five or six membered heterocyclyl ring, which is optionally substituted by one or more substituents selected from the group consisting of: acetyl, fluoro, methyl, -N(CH<sub>3</sub>)<sub>2</sub>, -CO<sub>2</sub>C<sub>1-2</sub>alkyl and C<sub>1-3</sub>alkoxyC<sub>1-3</sub>alkyl.

6. (Currently Amended) A compound according to any of claims 1 to 5 wherein:

R<sup>5</sup> represents hydrogen.

7. (Currently Amended) A compound according to any of claims 1 to 6 wherein:

Attorney Docket No.: PB60515USw R<sup>6</sup> is methyl. 8. (Currently Amended) A compound according to any of claims 1 to 7 wherein: R<sup>1</sup> is 2,3-dihydro-1-benzofuran-4-yl or 4-fluoro-3-(methyloxy)phenyl; R<sup>2</sup> is hydrogen; R<sup>3</sup> is selected from: C<sub>1-4</sub> alkyl optionally substituted by methoxy or methylsulphonyl; Pyridyl(CH<sub>2</sub>)<sub>m</sub>-; Methylpyrazolyl; and Tetrahydropyranyl; R<sup>4</sup> is hydrogen or methyl; R<sup>5</sup> is hydrogen; and R<sup>6</sup> is methyl. 9. (Currently Amended) A compound according to any of claims 1 to 8 wherein: R<sup>1</sup> is 2,3-dihydro-1-benzofuran-4-yl, 1-methyl-1H-indazol-6-yl or 4-fluoro-3-(methyloxy)phenyl; R<sup>2</sup> is hydrogen;

In a preferred embodiment R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are attached form a morpholinyl, a 2,6-dimethyl-4-morpholinyl, a 3-(ethoxycarbonyl)-1-piperidinyl, a 4-(*N*,*N*-dimethylamino)1-piperidinyl, a 4-acetyl-1-piperazinyl, or a 4-[(2-methyloxy)ethyl]-1-piperazinyl ring.

R<sup>5</sup> is hydrogen; and

R<sup>6</sup> is methyl.

- 10. (Currently Amended) A compound of formula (I) selected from the group consisting of:
- 4-{[3-(methyloxy)phenyl]amino}-N<sup>6</sup>-phenyl-3,6-quinolinedicarboxamide,
- 4-{[3-(methyloxy)phenyl]amino}-6-(4-morpholinylcarbonyl)-3-quinolinecarboxamide,
- $N^6$ ,  $N^6$ -dimethyl-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $N^6$ -1,3-benzothiazol-6-yl-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $N^6$ -(1-methyl-1*H*-benzimidazol-5-yl)-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- 4-{[3-(methyloxy)phenyl]amino}- $N^6$ -3-pyridinyl-3,6-quinolinedicarboxamide,  $N^6$ -[3-(methyloxy)phenyl]-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $N^6$ -1,3-benzodioxol-5-yl-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $4-\{[3-(methyloxy)phenyl]amino}-N^6-(3-oxo-2,3-dihydro-1$ *H*-inden-5-yl)-3,6-quinolinedicarboxamide,
- 4-{[3-(methyloxy)phenyl]amino}- $N^6$ -[6-(methyloxy)-3-pyridinyl]-3,6-quinolinedicarboxamide,
- $N^6$ -(4-chlorophenyl)-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- 4-{[3-(methyloxy)phenyl]amino}-6-(1-piperidinylcarbonyl)-3-quinolinecarboxamide.

- $4-\{[3-(methyloxy)phenyl]amino}-N^6-(1,3-thiazol-2-ylmethyl)-3,6-quinolinedicarboxamide,$
- $N^6$ -(1,3-dihydro-2-benzofuran-5-yl)-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $N^6$ -[(3-methyl-5-isoxazolyl)methyl]-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- $N^6$ -[(5-chloro-2-pyridinyl)methyl]-4-{[3-(methyloxy)phenyl]amino}-3,6-quinolinedicarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-N~6~,8-dimethyl-N~6~-[2-(methyloxy)ethyl]-3,6-quinolinedicarboxamide
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-6-(4-morpholinylcarbonyl)-3-quinolinecarboxamide,
- 8-methyl-4-[(1-methyl-1H-indazol-6-yl)amino]-6-(4-morpholinylcarbonyl)-3-quinolinecarboxamide,
- 4-{[4-fluoro-3-(methyloxy)phenyl]amino}-8-methyl-6-(4-morpholinylcarbonyl)-3-quinolinecarboxamide,
- 4-{[4-fluoro-3-(methyloxy)phenyl]amino}-N~6~,8-dimethyl-N~6~-[2-(methyloxy)ethyl]-3,6-quinolinedicarboxamide,
- 4-{[4-fluoro-3-(methyloxy)phenyl]amino}-N~6~,8-dimethyl-N~6~-[2-(methylsulfonyl)ethyl]-3,6-quinolinedicarboxamide,
- 6-[(4-acetyl-1-piperazinyl)carbonyl]-4-{[4-fluoro-3-(methyloxy)phenyl]amino}-8-methyl-3-quinolinecarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-N~6~,N~6~,8-trimethyl-3,6-quinolinedicarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-6-({4-[2-(methyloxy)ethyl]-1-piperazinyl}carbonyl)-3-quinolinecarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-6-[(2,6-dimethyl-4-morpholinyl)carbonyl]-8-methyl-3-quinolinecarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-6-{[4-(dimethylamino)-1-piperidinyl]carbonyl}-8-methyl-3-quinolinecarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-N~6~,8-dimethyl-N~6~-(4-pyridinylmethyl)-3,6-quinolinedicarboxamide,

6-[(4-acetyl-1-piperazinyl)carbonyl]-4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-3-quinolinecarboxamide,

- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-N~6~-4-pyridinyl-3,6-quinolinedicarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-N~6~-(tetrahydro-2H-pyran-4-yl)-3,6-quinolinedicarboxamide,
- 4-(2,3-dihydro-1-benzofuran-4-ylamino)-8-methyl-N~6~-(1-methyl-1H-pyrazol-5-yl)-3,6-quinolinedicarboxamide, -

and pharmaceutically acceptable salts thereof.

- 11. (Currently Amended) A process for the preparataion of a compound of formula (I) and pharmaceutically acceptable salts thereof as claimed in any of claims 1 to 10 which comprises:
- (A) reacting a compound of formula (II)

$$\begin{array}{c} & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>5</sup> and R<sup>6</sup> are as defined above with a suitable amide coupling agent followed by treatment with an amine of formula R<sup>3</sup>R<sup>4</sup>NH wherein R<sup>3</sup> and R<sup>4</sup> are as defined above; or

(B) reacting a compound of formula (IV)

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>5</sup> and R<sup>6</sup> are as defined above and Y represents chlorine, bromine or iodine, with carbon monoxide and an amine of formula R<sup>3</sup>R<sup>4</sup>NH, wherein R<sup>3</sup> and R<sup>4</sup> are as defined above, in a suitable solvent such as toluene, at a suitable temperature such as the reflux temperature of the solvent, in the presence of a suitable catalyst, such as a palladium catalyst, *e.g.* dichlorobis(triphenylphosphine)palladium(II) and a suitable base, such as triethylamine; or

## (C) reacting a compound of formula (XI)

$$R^3$$
 $N$ 
 $R^4$ 
 $R^5$ 
 $R^6$ 
(XI)

wherein R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> are as defined above and X is halogen, by treatment with an amine of formula R<sup>1</sup>R<sup>2</sup>NH, wherein R<sup>1</sup> and R<sup>2</sup> are as defined above.

- (D) interconversion of a compound of formula (I) into another compound of formula (I); or
- (E) deprotecting a protected derivative of a compound of formula (I).

12. - 14. (Canceled).

15. (Currently Amended) A pharmaceutical composition which comprises a compound according to any of claims 1 to 10 optionally with a pharmaceutically acceptable carrier or excipient.

- 16. (Previously presented) A pharmaceutical composition according to claim 15 which is suitable for inhaled administration.
- 17. (Previously presented) A pharmaceutical composition according to claim 15 which is suitable for oral administration.
- 18. (New) A method of inhibiting PDE4, comprising the administration of the compound of claim 1 or a pharmaceutically acceptable salt thereof.
- 19. (New) A method of treating inflammatory and allergic diseases, comprising the step of administering the compound of claim 1 or a pharmaceutically acceptable salt thereof.